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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,650	04/05/2000	JEAN-LUC PHILIPPE BETTIOL	CM1817	7080

27752 7590 08/13/2004

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EXAMINER	
ELHILO, EISA B	

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/485,650	Applicant(s) BETTIOL ET AL.	
	Examiner Eisa B Elhilo	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,13,14,16,17 and 20-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,13,14,16,17 and 20-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 7/09/2004 has been entered.

2 Claims 1, 13-14, 16-17 and 20-31 are pending in this application.

Claim Rejections - 35 USC § 103

3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 13-14, 16-17 and 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghosh et al. (US' 5,858,948) in combination with Cuperus et al. (WO' 95/35362).

Ghosh (US' 948) teaches a laundry liquid detergent composition comprising at least about 0.001% by weight of a protease enzyme and cotton soil release polymers of modified polyamines in which the NH hydrogen of the backbone is replaced by an E unit (substitution), quaternizing a backbone nitrogen or oxidizing a backbone nitrogen to the N-oxide (amine oxide derivatives) such as polyethyleneimines (PETs) (see col. 21, lines 10-30, col. 29, line 9),

wherein the cotton release polymer comprises a PEI backbone wherein all substitutable primary amine nitrogen are modified by replacing of hydrogen with a polyoxylakyleneoxy unit – $(CH_2CH_2O)_7H$ (see col. 31, lines 3-6 and formula IV), wherein the cotton soil release polymers are 1800E7, 1200E7 and 600 E20 (see col. 54-57 and Examples 1-7) and wherein the soil release polymers are used in the amount of 0.01 to 10.0% in the composition as claimed in claims 1, 16 and 17 (see col. 18, lines 55-58), non ionic surfactants having EO 1-5 ehtoxycarboxylates, C_{12}-C_{18} alkyl ethoxylates and C_{12}-C_{18} N-methylglucamide as claimed in claims 20-26 (see col. 33, lines 55-67 and col. 34, line 20), wherein the composition further comprises builders such as layered silicates as claimed in claims 27-28 (see col. 44, line 24) and known polymeric soil release agents suitable for use in the detergent composition such as SRA's polymer as claimed in claim 29 (see col. 18, lines 50-55), wherein the soil release polymer is anionic-end-capped oligomeric esters (polyester) as claimed in claim 30 (see col. 19, lines 37-47). Ghosh also teaches a method for providing soil release from cotton fabric said method comprising contacting cotton fabric in need of cleaning with an amount effective to clean said fabric of liquid laundry composition as claimed in claim 31(see col. 71 and 72, claims 16 and 17).

Ghosh fails to teach a laundry liquid detergent composition that comprises mannanase enzyme derived from *Bacillus agaradherens or Basillus substilisis* dtrain 168 as claimed.

However, Ghosh teaches that detersive enzymes having a cleaning stain removing or otherwise beneficial effect in a laundry, hard surface cleaning or personal care detergent composition can be used or incorporated in the laundry detergent composition. Preferred detersive enzymes are proteases, amylases, cellulases, lipases and peroxidases (see col. 40, lines 11-17).

Cuperus (WO' 362) in analogous art teaches detergent compositions for dish washing, household or domestic, cleaners, pre-wash and/or other textile, fabric and cloth cleaning (see page 11, lines 32-37). The laundry detergent composition comprises enzymes such as amylases and proteases (see page 11, lines 26-30). Further, Cuperus teaches that mannanases enzyme provide for improved washing results in laundry washing and pre-spot experiments (see page 32, lines 5-37, table 12 and page 33, line 1-2).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference of Ghodh (US' 948) by incorporating the mannanase enzyme that disclosed by Cuperus to make such a composition with a reasonable expectation of success for improving the washing performance of the composition. Such modification would be obvious because Ghosh (US' 948) teaches a laundry liquid detergent composition that comprises detersive enzymes such as proteases, amylases and cellulases (see col. 40, lines 11-17). Ghosh (US' 948) also discloses that other detersive enzymes having a cleaning, stain removing or otherwise beneficial effect in a laundry, hard surface cleaning or personal care detergent composition can be used or incorporated in the laundry detergent composition (see col. 40, lines 11-17). Cuperus (WO' 362) teaches in analogous art a cleaning composition that comprises detersive enzymes such as mannanases, proteases and amylases (see page 11, lines 26-30 and page 32, lines 5-37, table 12 and page 33, lines 1-2). Further, Cuperus (WO' 362) teaches experimentally that mannanase enzymes provide for improved washing results when used in automatic dishwashing and laundry washing (see page 31, lines 35-37, page 32, lines 1-10, table 12, lines 36-37 and page 33, lines 1-2), and, thus a person of ordinary skill in the art would be

motivated to incorporate the mannanase enzyme in the laundry detergent composition of Ghosh (US' 948) with a peasonavle expectation of success to improve the washing performance of the composition and would expect such a composition to have similar results to those claimed and also would expect that mannanase enzymes will have similar properties no matter from which generic source these enzymes are derived or generated, absent unexpected results.

Further, the applicant has not shown on record the criticality of the selected mannanase enzymes in the claimed composition over the prior art compositions.

Response to Applicant's Arguments

4 Applicant's arguments with respect to the rejection of Ghosh in view of Cuperus have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eisa Elhilo
Patent Examiner\
Art Unit 1751

August 11, 2004